

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025175**Date Inspected:** 02-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	Yes	No			
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG				

**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Segment 13E Coating Inspections, Trial Assembly area

Notice of Inspection 7268 Item #1: ZPMC notified Caltrans QA Inspectors that segment 13E bottom plates have been painted and are ready for final dry film thickness measurements (DFT). This QA Inspector and one other QA Inspector observed ABF and ZPMC performing DFT measurements and the thickness paint on segment 13E bottom plates appears to exceed the maximum listed in the project specifications. ZPMC coating Inspectors agreed the paint thickness is excessive and they informed QA Inspectors that ZMPC workers will remove the excess paint materials from the bottom plates.

OBG segment 14 East Coating Inspections, Blast Bay #1

Notice of Inspection 7269 Item #1: This QA Inspector performed random visual inspections of segment 14E internal east anchor plate bottom plate BP3084A between floor beam FB3262B (crossbeam side) and the 3rd vertical plate from plate SA3359A between the anchor plate and the end weld seam reference drawing SEG3019W.

This QA Inspector along with one other QA Inspector observed ZPMC appears to have completed blast preparation of these surfaces and they appear to comply with project specifications. ZPMC visually rejected the

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blasted surfaces between plate SA3359A and vertical plate VP3107A. This QA Inspector observed ZPMC QC performing salt tests and profile tests and the results of these test appear to comply with project specifications. Approximately two hours later ZPMC requested another inspection of the areas that had previously been rejected. ZPMC and ABF Inspectors informed QA Inspectors that these areas are acceptable and QA Inspectors performed random visual inspections and items appear to comply with project specifications.

### OBG segment 14West Coating Inspections, Blast bay #2

Notice of Inspection 7272 Item #1: ZPMC informed QA Inspectors that segment 14W north (counterweight) side internal deck plate and adjacent vertical plates between panel point PP126 and PP127.8 have been grit blasted and they are ready for final visual inspections prior to painting. ZPMC QC performed initial visual inspections of these areas and they informed this QA Inspector that they have visually rejected the blasted surfaces, but the salt and profile testing were acceptable.

Notice of Inspection 7274 Item #1: ZPMC informed QA Inspectors that segment 14W north (counterweight) side internal deck plate and adjacent vertical plates between panel point PP126 and PP127.8 have been grit blasted in the areas that were previously rejected and they are ready for final visual inspections prior to painting. ZPMC QC informed this QA Inspector that they have visually accepted the blasted surfaces. This QA Inspector along with two other QA Inspector observed ZPMC appears to have completed blast preparation of these surfaces, three small areas were identified as needing to be reblasted and ZPMC installed tape over these areas. The remaining areas appeared to comply with project specifications.

### Segment 13West Coating Inspections, Blast Bay 4

Notice of Inspection 7246 Item #1: ZPMC notified Caltrans QA Inspectors that segment 13W Internal east section ceiling and vertical floor beam plates from PP118 to PP119-1.5m have been blasted and are ready for inspections prior to application of paint. ZPMC and ABF painting Inspectors informed this QA Inspector that they have visually accepted these surfaces and that the salt and profile tests are acceptable. This QA Inspector and one other QA Inspector performed random visual inspections of these areas and items observed appeared to comply with project specifications.

### Segment 14West initial blast Inspections, Blast Bay 4

ABF verbally requested Caltrans personnel to perform visual inspections of OBG segment 14W anchor plate, adjacent ceiling and vertical plates from between the anchor plate and the end of the segment. This QA Inspector and two other QA Inspectors performed initial visual inspections of these areas and observed many of the welds and adjacent base material surfaces had a coating of rust and the areas do not appear to have been initially blasted. This rust prohibits adequate visual inspections of these areas and QA Inspectors did not perform visual inspections of these areas. This QA Inspector informed ABF Paint Inspector "Stone" that the areas were not ready for inspections and he said he was not involved in this inspection but he would pass on the information to other ABF and ZPMC personnel. Photos of some of these areas were placed on the common "Z" drive under 14W Blast Inspections. See the photograph below for additional information.

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### Summary of Conversations:

See Above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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